Amendments to the Specification

Please replace the paragraph beginning on page 23, line 6 with the following amended paragraph:

Upon reproducing, the inspection probe 23 is removed from the analysis board [[45]] 24 and the normal microcomputer 45 is mounted on the microcomputer socket 36. In the next place, the reproduce software 30 is loaded in the work station 26 to be executed. The reproduce software 30 may perform the following operation and wait detection of the defect. At first, all ports of the terminal digital IO board 33 are set at output. In the next place, the control digital IO board 34 is operated so as to set up the microcomputer interface module 35 and a set signal is transmitted to the microcomputer interface module 35 via the analysis board control line.

Please replace the paragraph beginning on page 35, line 14 with the following amended paragraph:

The operation upon analyzing the defective data according to the fifth embodiment is shown in a flow chart of the automatic trace software in Fig. 24. If the program is started, at S31 [[S41]], the reading timing range and the reading address range are set [[(S41)]] (S31), the read-out address is initialized at S42 (S42), and at S43 to S48, and S54, as in the fourth embodiment, the conditions of the register and the RAM are obtained.

Please replace the paragraph beginning on page 42, line 23 with the following amended paragraph:

With respect to recording according to the second embodiment, a structural diagram of an analysis board is shown in FIG. 32. Upon recording, the data is recorded at the actual speed. In addition, with respect to the reproduction according to the second embodiment, ~~FIG. 32~~ FIG. 33 shows a structural diagram of an analysis board (upon reproducing).

Please replace the paragraph beginning on page 46, line 24 with the following amended paragraph:

In the next place, an analysis board to support the microcomputer that is provided with the analog input terminal will be described with reference to a structural diagram of the analysis board to support analog (upon recording) shown in FIG. 37. According to the twelfth embodiment, the following items are added to the analysis board according to the second embodiment. An analog input terminal [[93]] is an analog input terminal of the microcomputer. The analog terminal input line transmits the applied voltage of the analog input terminal [[93]]. The analog terminal output line is invalid because it is set at a high impedance (stop) condition. The above described two lines are connected to the analog input terminal [[93]] of the microcomputer socket 36 and they are conducted with each other.

Please replace the paragraph beginning on page 47, line 17 with the following amended paragraph:

To the work station upon recording, the following items are modified. The output analog trace data 106 is the copy of the recorded analog trace data 100 under the control of the record software to support analog 98. In accordance with this data, the voltage to be applied to the analog input terminal [[93]] is generated. The analog terminal input line is set at a stop condition under the control of the record software to support analog. The analog terminal output line is set at an output condition under the control of the record software to support analog 98 to output the voltage that sequentially digital-to-analog-converts the output analog trace data 106.

Please replace the paragraph beginning on page 48, line 3 with the following amended paragraph:

In the next place, the reproduction according to the twelfth embodiment will be described with reference to a structural diagram of the analysis board to support the analog input terminal (upon reproducing) shown in FIG. 39. The analog terminal input line is set at the stop condition. The analog terminal output line is set at the output condition to apply the voltage to the analog input terminal. The above described two lines are connected to the analog input terminal [[93]] of the microcomputer socket 36.

Please replace the paragraph beginning on page 48, line 21 with the following amended paragraph:

Upon reproducing the analog input terminal, after the recorded analog trace data 100 is copied into the output analog trace data 106, this data is loaded in the analog IO board 103, the digital-to-analog conversion is carried out in synchronization with the terminal trace data 99, and the analog voltage is applied to the analog input terminal [[93]] by way of the analog output port, the analog terminal output line, the microcomputer socket, and the analog input terminal. Depending on this operation, to the analog input terminal [[93]] of the normal microcomputer 45, the same voltage as that upon recording is applied.

Please replace the paragraph beginning on page 49, line 11 with the following amended paragraph:

According to the twelfth embodiment, a method to support the analog input terminal was described, however, an object of a thirteenth embodiment is to adapt to the microcomputer to support the analog input terminal, i.e., the microcomputer that is provided with analog-to-digital conversion. According to the thirteenth embodiment <u>as described with respect to FIGS. 40 and 41</u>, upon recording, the applied voltage of an analog output terminal 155 is recorded. Then, upon reproducing, the voltage outputted from the analog output terminal 155 is compared to the voltage upon recording.

Please replace the paragraph beginning on page 51, line 21 with the following amended paragraph:

The fourteenth embodiment basically comprises a method to collect the mutual analog difference properties of the microcomputers to be compared and to correct the microcomputers before using the trace. The microcomputer with a debug monitor mounted therein is used because it is necessary to read a conversion value of an analog-to-digital converter, i.e., an analog input resister in order to evaluate the analog-to-digital property of the analog input terminal. FIG. 43 shows an inner structure of a microcomputer in which the debug monitor is used. The present embodiment is different from the fourth embodiment that is explained with respect to the microcomputer with the debug monitor mounted thereon in that the present embodiment has an analog input terminal [[119]] and an analog input register 114 holding a value calculated by analog-to-digital converting the analog input terminal voltage.